

PART 70 SIGNIFICANT SOURCE MODIFICATION OFFICE OF AIR QUALITY

**Weil-McLain
500 Blaine Street
Michigan City, Indiana 46360-2388**

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this approval.

This approval is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Source Modification No.: 091-14688-00020	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date:

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SECTION A

SOURCE SUMMARY

This approval is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the emission units contained in conditions A.1 through A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this approval pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a stationary gray iron foundry.

Responsible Official:	Thomas O. May, President
Source Address:	500 Blaine Street, Michigan City, Indiana 46360
Mailing Address:	500 Blaine Street, Michigan City, Indiana 46360-2388
General Source Phone Number:	219-879-6561
SIC Code:	3321
County Location:	LaPorte
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Major Source, under PSD Rules Major Source, Section 112 of the Clean Air Act 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source is approved to construct and operate the following emission units and pollution control devices:

- (a) One (1) indoor scrap handling operation consisting of the following:
 - (1) one (1) metal scrap crusher, with a maximum scrap metal throughput of 15 tons per hour, with one (1) baghouse for control of particulate matter emissions, exhausting through one (1) stack (ID No. 1);
 - (2) one (1) rotary reclaimer, with maximum scrap metal and sand throughputs of 15 and 10 tons per hour, respectively, with one (1) baghouse for control of particulate matter emissions, exhausting through one (1) stack (ID No. 1);
 - (3) one (1) sand and metal conveyor, with maximum scrap metal and sand throughputs of 15 and 10 tons per hour, respectively, with one (1) baghouse for control of particulate matter emissions, exhausting through one (1) stack (ID No. 1); and
 - (4) one (1) pneumatically conveyed spent sand storage silo, with a maximum sand storage capacity of 100 tons, and a maximum sand throughput of 10 tons per hour, with one (1) baghouse for control of particulate matter emissions, exhausting through one (1) stack (ID No. 1).
- (b) one (1) pneumatically conveyed raw sand storage silo for the High Speed Continuous Sand Mixer, with a maximum sand storage capacity of 75 tons, and a maximum sand throughput of 10 tons per hour, with one (1) baghouse for control of particulate matter emissions, exhausting through one (1) stack (ID No. 1).

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONSTRUCTION CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

B.3 Revocation of Permits [326 IAC 2-1.1-9(5)][326 IAC 2-7-10.5(i)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.4 Significant Source Modification [326 IAC 2-7-10.5(h)]

This document shall also become the approval to operate pursuant to 326 IAC 2-7-10.5(h) when, prior to start of operation, the following requirements are met:

- (a) The attached affidavit of construction shall be submitted to the Office of Air Quality (OAQ), Permit Administration & Development Section, verifying that the emission units were constructed as proposed in the application. The emissions units covered in the Significant Source Modification approval may begin operating on the date the affidavit of construction is postmarked or hand delivered to IDEM if constructed as proposed.
- (b) If actual construction of the emissions units differs from the construction proposed in the application, the source may not begin operation until the source modification has been revised pursuant to 326 IAC 2-7-11 or 326 IAC 2-7-12 and an Operation Permit Validation Letter is issued.
- (c) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
- (d) The Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this document.
- (e) In the event that the Part 70 application is being processed at the same time as this application, the following additional procedures shall be followed for obtaining the right to operate:
 - (1) If the Part 70 draft permit has not gone on public notice, then the change/addition covered by the Significant Source Modification will be included in the Part 70 draft.
 - (2) If the Part 70 permit has gone through final EPA proposal and would be issued ahead of the Significant Source Modification, the Significant Source Modification will go through a concurrent 45 day EPA review. Then the Significant Source Modification will be incorporated into the final Part 70 permit at the time of issuance.

- (3) If the Part 70 permit has gone through public notice, but has not gone through final EPA review and would be issued after the Significant Source Modification is issued, then the Modification would be added to the proposed Part 70 permit, and the Title V permit will issued after EPA review.

SECTION C GENERAL OPERATION CONDITIONS

C.1 Certification ~~[326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]~~

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

C.2 Preventive Maintenance Plan ~~[326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)]~~ ~~[326 IAC 1-6-3]~~

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) when operation begins, including the following information on each facility:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The PMP and the PMP extension notification do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

C.3 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

C.4 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

Testing Requirements [326 IAC 2-7-6(1)]

C.7 Performance Testing [326 IAC 3-6][326 IAC 2-1.1-11]

- (a) Compliance testing on new emission units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this approval, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this approval, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ within forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.8 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.9 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

If required by Section D, all monitoring and record keeping requirements shall be implemented when operation begins. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment.

C.10 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

- (a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ($\pm 2\%$) of full scale reading.
- (b) Whenever a condition in this permit requires the measurement of a temperature, flow rate, or pH level, the instrument employed shall have a scale such that the expected normal

reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ($\pm 2\%$) of full scale reading.

- (c) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.11 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. The compliance monitoring plan can be either an entirely new document, consist in whole of information contained in other documents, or consist of a combination of new information and information contained in other documents. If the compliance monitoring plan incorporates by reference information contained in other documents, the Permittee shall identify as part of the compliance monitoring plan the documents in which the information is found. The elements of the compliance monitoring plan are:
 - (1) This condition;
 - (2) The Compliance Determination Requirements in Section D of this permit;
 - (3) The Compliance Monitoring Requirements in Section D of this permit;
 - (4) The Record Keeping and Reporting Requirements in Section C (General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
 - (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAQ upon request and shall be subject to review and approval by IDEM, OAQ. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of:
 - (A) Reasonable response steps that may be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
 - (B) A time schedule for taking reasonable response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to take reasonable response steps may constitute a violation of the permit.
- (c) Upon investigation of a compliance monitoring excursion, the Permittee is excused from taking further response steps for any of the following reasons:
 - (1) A false reading occurs due to the malfunction of the monitoring equipment. This shall be an excuse from taking further response steps providing that prompt action

was taken to correct the monitoring equipment.

- (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied.
- (3) An automatic measurement was taken when the process was not operating.
- (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (e) All monitoring required in Section D shall be performed at all times the equipment is operating. If monitoring is required by Section D and the equipment is not operating, then the Permittee may record the fact that the equipment is not operating or perform the required monitoring.
- (f) At its discretion, IDEM may excuse the Permittee's failure to perform the monitoring and record keeping as required by Section D, if the Permittee provides adequate justification and documents that such failures do not exceed five percent (5%) of the operating time in any quarter. Temporary, unscheduled unavailability of qualified staff shall be considered a valid reason for failure to perform the monitoring or record keeping requirements in Section D.

C.12 Emergency Provisions [326 IAC 2-7-16]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-7-16.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
 - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
 - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency,

or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality,
Compliance Section), or

Telephone Number: 317-233-5674 (ask for Compliance Section)

Facsimile Number: 317-233-5967

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
 - (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
 - (e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(10) be revised in response to an emergency.
 - (f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
 - (g) Operations may continue during an emergency only if the following conditions are met:
 - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
 - (2) If an emergency situation causes a deviation from a health-based limit, the

Permittee may not continue to operate the affected emissions facilities unless:

- (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
- (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value.

Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

**C.13 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]
[326 IAC 2-7-6]**

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.14 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

- (a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.15 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

- (a) The reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

- (b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- (a) One (1) indoor scrap handling operation consisting of the following:
 - (1) one (1) metal scrap crusher, with a maximum scrap metal throughput of 15 tons per hour, with one (1) baghouse for control of particulate matter emissions, exhausting through one (1) stack (ID No. 1);
 - (2) one (1) rotary reclaimer, with maximum scrap metal and sand throughputs of 15 and 10 tons per hour, respectively, with one (1) baghouse for control of particulate matter emissions, exhausting through one (1) stack (ID No. 1);
 - (3) one (1) sand and metal conveyor, with maximum scrap metal and sand throughputs of 15 and 10 tons per hour, respectively, with one (1) baghouse for control of particulate matter emissions, exhausting through one (1) stack (ID No. 1); and
 - (4) one (1) pneumatically conveyed spent sand storage silo, with a maximum sand storage capacity of 100 tons, and a maximum sand throughput of 10 tons per hour, with one (1) baghouse for control of particulate matter emissions, exhausting through one (1) stack (ID No. 1).
- (b) one (1) pneumatically conveyed raw sand storage silo for the High Speed Continuous Sand Mixer, with a maximum sand storage capacity of 75 tons, and a maximum sand throughput of 10 tons per hour, with one (1) baghouse for control of particulate matter emissions, exhausting through one (1) stack (ID No. 1).

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Particulate Matter (PM) [326 IAC 2-2]

- (a) The total PM and PM10 emissions from the indoor scrap handling operation and the raw sand storage silo that are controlled by the baghouse that exhausts through stack No. 1 shall not exceed 5.63 and 3.35 pounds per hour, respectively, to ensure the requirements of 326 IAC 2-2 (PSD) do not apply.
- (b) The total PM and PM10 emissions from the High Speed Continuous Sand Mixer, permitted in Significant Source Modification No. 091-12963-00020, issued April 6, 2001, that is controlled by the baghouse identified as Baghouse N that exhausts inside the building, shall not exceed 0.05 and 0.05 pound per hour, respectively, to ensure the requirements of 326 IAC 2-2 (PSD) do not apply.
- (c) This source will limit the throughput of sand from the raw sand storage silo to a maximum of 42,924 tons of sand per twelve (12) consecutive month period.

The above PM and PM10 emission limitations and the sand throughput limitation will limit total PM and PM10 emissions from the indoor scrap handling operation, the raw sand storage silo, and the High Speed Continuous Sand Mixer to less than 25 and 15 tons per year, respectively. Therefore, the requirements of 326 IAC 2-2 (PSD) do not apply.

D.1.2 Particulate Matter (PM) [326 IAC 6-3-2]

- (a) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the scrap handling operation and the raw sand storage silo shall be limited as follows:

Emission Unit ID	Process Weight (tons/hr)	Allowable PM Emissions (lb/hr)
Crusher	15	25.16
Rotary Reclaimer	25	35.43
Spent Sand Storage Silo	10	19.18
Sand and Metal Conveyor	25	35.43
Raw Sand Storage Silo	10	19.18

- (b) For purposes of demonstrating compliance with the PM emission limits for the scrap handling operation and the raw sand storage silo, all of which are controlled by the baghouse that exhausts through stack No. 1, the allowable PM emission rate from stack No. 1 shall be limited to 134.38 pounds per hour.

The pounds per hour limitations were calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Compliance Determination Requirements

D.1.4 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

During the period within 180 days after issuance of this permit, in order to demonstrate compliance with Conditions D.1.1 and D.1.2, the Permittee shall perform PM and PM-10 testing on the baghouse that exhausts through stack No. 1 utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM-10 includes filterable and condensable PM-10. Testing shall be conducted in accordance with Section C- Performance Testing.

D.1.5 Particulate Matter (PM)

In order to comply with conditions D.1.1 and D.1.2, the baghouse for PM and PM10 control shall be in operation and control emissions from the scrap handling operation and the raw sand silo at all times that these facilities are in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.6 Visible Emissions Notations

- (a) Visible emission notations of the baghouse stack exhaust (ID Stack No. 1) shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

D.1.7 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the scrap handling operation and the raw sand storage silo, at least once per shift when the scrap handling operation or the raw sand storage silo is in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 3.0 and 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.1.8 Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags controlling the scrap handling operation and the raw sand storage silo when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

D.1.9 Broken or Failed Bag Detection

In the event that bag failure has been observed:

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency

Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.10 Record Keeping Requirements

- (a) To document compliance with Condition D.1.6, the Permittee shall maintain records of visible emission notations of the baghouse stack exhaust once per shift.
- (b) To document compliance with Condition D.1.7, the Permittee shall maintain the following:
 - (1) Weekly records of the following operational parameters during normal operation when venting to the atmosphere:
 - (A) Inlet and outlet differential static pressure; and
 - (B) Cleaning cycle operation.
 - (2) Documentation of the dates vents are redirected.
- (c) To document compliance with Condition D.1.8, the Permittee shall maintain records of the results of the inspections required under Condition D.1.8 and the dates the vents are redirected.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.11 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.1(c) shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

**PART 70 SOURCE MODIFICATION
CERTIFICATION**

Source Name: Weil-McLain
Source Address: 500 Blaine Street, Michigan City, Indiana 46360
Mailing Address: 500 Blaine Street, Michigan City, Indiana 46360-2388
Source Modification No.: 091-14688-00020

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this approval.

Please check what document is being certified:

- 9 Test Result (specify) _____
- 9 Report (specify) _____
- 9 Notification (specify) _____
- 9 Affidavit (specify) _____
- 9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Source Modification Quarterly Report

Source Name: Weil-McLain
Source Address: 500 Blaine Street, Michigan City, Indiana 46360
Mailing Address: 500 Blaine Street, Michigan City, Indiana 46360-2388
Source Modification No.: 091-14688-00020
Facility: Raw sand storage silo
Parameter: Sand throughput
Limit: This source will limit the throughput of sand from the raw sand storage silo to a maximum of 42,924 tons of sand per twelve (12) consecutive month period.

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	Sand Throughput This Month (tons)	Sand Throughput Previous 11 Months (tons)	12 Month Total Sand Throughput (tons)

- 9 No deviation occurred in this quarter.
- 9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Affidavit of Construction

Name (typed or printed)

Indiana Department of Environmental Management Office of Air Quality

Addendum to the Technical Support Document for a Part 70 Significant Source Modification

Source Name:	Weil-McLain
Source Location:	500 Blaine Street, Michigan City, Indiana 46360
County:	LaPorte
Source Modification No.:	091-14688-00020
SIC Code:	3321
Permit Reviewer:	Trish Earls/EVP

On October 5, 2001, the Office of Air Quality (OAQ) had a notice published in The News Dispatch, Michigan City, Indiana, stating that Weil-McLain had applied for a Significant Source Modification to construct a new scrap handling operation and a raw sand storage silo at their existing gray iron foundry. The notice also stated that OAQ proposed to issue a permit for this installation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Upon further review, the OAQ has decided to make the following revisions to the permit (bolded language has been added, the language with a line through it has been deleted).

1. A condition including the required procedures for performance testing was erroneously left out of section C of the permit. Therefore, a testing requirements section including this condition, numbered C.7, is now added to section C and reads as follows:

Testing Requirements [326 IAC 2-7-6(1)]

C.7 Performance Testing [326 IAC 3-6][326 IAC 2-1.1-11]

- (a) Compliance testing on new emission units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this approval, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this approval, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days

- prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ within forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

All subsequent conditions in section C have been re-numbered accordingly.

2. For purposes of determining compliance, condition D.1.2 has been revised to specify one overall PM limit for stack No. 1, which is the exhaust point for the baghouse controlling the indoor scrap handling operation and the raw sand storage silo, to comply with 326 IAC 6-3-2. This will provide a single PM emission limit for stack No. 1 pursuant to 326 IAC 6-3-2 so that the compliance stack testing results can be used to determine compliance. The condition now reads as follows:

D.1.2 Particulate Matter (PM) [326 IAC 6-3-2]

- (a) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the scrap handling operation and the raw sand storage silo shall be limited as follows:

Emission Unit ID	Process Weight (tons/hr)	Allowable PM Emissions (lb/hr)
Crusher	15	25.16
Rotary Reclaimer	25	35.43
Spent Sand Storage Silo	10	19.18
Sand and Metal Conveyor	25	35.43
Raw Sand Storage Silo	10	19.18

- (b) **For purposes of demonstrating compliance with the PM emission limits for the scrap handling operation and the raw sand storage silo, all of which are controlled by the baghouse that exhausts through stack No. 1, the allowable PM emission rate from stack No. 1 shall be limited to 134.38 pounds per hour.**

The pounds per hour limitations were calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

3. Condition D.1.3 erroneously refers to Section B - Preventive Maintenance Plan of the permit when it should refer to Section C. Therefore, condition D.1.3 is revised to read as follows:

D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section **BC** - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

4. Condition D.1.7, Parametric Monitoring, listed the incorrect pressure drop range for the baghouse used in conjunction with the scrap handling operation and the raw sand silo. This condition has been revised to include the correct pressure drop range as follows:

Weil-McLain
Michigan City, Indiana
Permit Reviewer: TE/EVP

Page 3 of 4
Source Modification No. 091-14688-00020

D.1.7 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the scrap handling operation and the raw sand storage silo, at least once per shift when the scrap handling operation or the raw sand storage silo is in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of ~~9-03.0~~ **12-06.0** inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Source Modification to a Part 70 Source

Source Background and Description

Source Name:	Weil-McLain
Source Location:	500 Blaine Street, Michigan City, Indiana 46360-2388
County:	LaPorte
SIC Code:	3321
Operation Permit No.:	T091-6295-00020
Operation Permit Issuance Date:	Pending
Source Modification No.:	091-14688-00020
Permit Reviewer:	Trish Earls/EVP

The Office of Air Quality (OAQ) has reviewed a modification application from Weil-McLain relating to the construction and operation of a new indoor scrap handling operation and a new raw sand storage silo at the existing gray iron foundry.

History

On July 24, 2001, Weil-McLain submitted an application to the OAQ requesting to add a new indoor scrap handling operation and a new raw sand storage silo to their existing plant. The new scrap handling operation does not allow for any increased utilization. This operation is at the end of the foundry production process and is intended to allow the source to increase the percentages of metal and sand reclaimed from the foundry operations in order to reduce landfill costs associated with disposing of these materials. It does not increase the production capacity of the existing gray iron foundry. The new raw sand storage silo is to be used to store raw sand for the High Speed Continuous Sand Mixer (ID Mixer), which was permitted under Significant Source Modification (SSM) No. 091-12963-00020, issued April 6, 2001. The storage silo is being installed as an alternate for the existing silo supplying sand to the High Speed Continuous Sand Mixer which is in poor condition. The maximum throughput of sand to the Sand Mixer is unchanged, therefore, the mold production capacity remains unchanged and no increased utilization is occurring. An Interim Significant Source Modification Petition (I-091-14688-00020) was issued for this modification on August 31, 2001.

Weil-McLain submitted an application for a Part 70 permit on July 19, 1996. The Title V permit application (T-091-6295-00020) is currently being reviewed by IDEM.

New Emission Units and Pollution Control Equipment

The application includes information relating to the construction and operation of the following equipment:

- (a) One (1) indoor scrap handling operation consisting of the following:
- (1) one (1) metal scrap crusher, with a maximum scrap metal throughput of 15 tons per hour, with one (1) baghouse for control of particulate matter emissions, exhausting through one (1) stack (ID No. 1);
 - (2) one (1) rotary reclaimer, with maximum scrap metal and sand throughputs of 15 and 10 tons per hour, respectively, with one (1) baghouse for control of particulate matter emissions, exhausting through one (1) stack (ID No. 1);
 - (3) one (1) sand and metal conveyor, with maximum scrap metal and sand throughputs of 15 and 10 tons per hour, respectively, with one (1) baghouse for control of particulate matter emissions, exhausting through one (1) stack (ID No. 1); and
 - (4) one (1) pneumatically conveyed spent sand storage silo, with a maximum sand storage capacity of 100 tons, and a maximum sand throughput of 10 tons per hour, with one (1) baghouse for control of particulate matter emissions, exhausting through one (1) stack (ID No. 1).
- (b) one (1) pneumatically conveyed raw sand storage silo for the High Speed Continuous Sand Mixer, with a maximum sand storage capacity of 75 tons, and a maximum sand throughput of 10 tons per hour, with one (1) baghouse for control of particulate matter emissions, exhausting through one (1) stack (ID No. 1).

Existing Approvals

The source applied for a Part 70 Operating Permit on July 19, 1996. The source has been operating under previous approvals including, but not limited to, the following:

- (a) OP 46-09-82-0099, issued on August 24, 1978;
- (b) OP 46-09-86-0167, issued on November 1, 1983;
- (c) CP 091-2183-00020, issued on October 17, 1991; and
- (d) Significant Source Modification No. 091-12963-00020, issued April 6, 2001.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
1	Scrap Handling & Raw Sand Silo	15.0	Not available	20,000	ambient

Recommendation

The staff recommends to the Commissioner that the Significant Source Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on July 24, 2001.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (4 pages).

Potential To Emit Before Controls (Modification)

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA.”

Pollutant	Potential To Emit (tons/year)
PM	716.2
PM-10	221.6
SO ₂	0.0
VOC	0.0
CO	0.0
NO _x	0.0

There are no HAP emissions associated with this modification.

Justification for Modification

The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM and PM-10 is greater than 25 tons per year. Therefore, the Part 70 source is being modified through a Part 70 Significant Source Modification. This modification is being performed pursuant to 326 IAC 2-7-10.5(g). This Part 70 Significant Source Modification will give the source approval to construct and operate the new emission units.

This source is not eligible for a Part 70 Minor Source Modification under 326 IAC 2-7-10.5(d)(5) because the source must use a baghouse to control PM and PM10 emissions to below the PSD major modification thresholds of 25 and 15 tons per year, respectively. Therefore, since potential PM and PM10 emissions before control exceed the PSD major modification thresholds of 25 and 15 tons per year, respectively, the source does not satisfy the criteria under 326 IAC 2-7-10.5(d)(5)(C)(iii).

County Attainment Status

The source is located in LaPorte County.

Pollutant	Status
PM-10	attainment
SO ₂	maintenance
NO ₂	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO_x) are precursors for the formation of ozone. Therefore, VOC and NO_x emissions are considered when evaluating

the rule applicability relating to the ozone standards. LaPorte County has been designated as attainment or unclassifiable for ozone.

Source Status

Existing Source PSD Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/year)
PM	greater than 250
PM-10	greater than 250
SO ₂	less than 100
VOC	greater than 250
CO	less than 25
NOx	less than 100

- (a) This existing source is a major stationary source because an attainment regulated pollutant is emitted at a rate of 100 tons per year or more, and it is one of the 28 listed source categories.
- (b) These emissions are based upon the Title V application (T091-6295-00020) which is currently pending with IDEM.

Potential to Emit After Controls for the Modification

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units for the modification.

	Potential to Emit (tons/year)						
Process/facility	PM	PM-10	SO ₂	VOC	CO	NO _x	HAPs
Crusher	3.30	0.33	0.0	0.0	0.0	0.0	0.0
Rotary Reclaimer	2.30	1.62	0.0	0.0	0.0	0.0	0.0
Raw Sand Storage Silo*	0.85	0.13	0.0	0.0	0.0	0.0	0.0
Spent Sand Storage Silo	1.73	0.26	0.0	0.0	0.0	0.0	0.0
Sand & Metal Conveyor	15.90	2.40	0.0	0.0	0.0	0.0	0.0

High Speed Continuous Sand Mixer (permitted in SSM 091-12963-00020)*	0.08	0.01	0.0	24.90	0.0	0.0	1.06
Total Emissions	24.16	4.75	0.0	0.0	0.0	0.0	0.0
PSD Significant Levels	25	15	40	40	100	40	n/a

* Controlled PM and PM10 emissions from raw sand storage silo include the existing sand throughput limitation to the High Speed Continuous Sand Mixer to limit VOC emissions below PSD significant thresholds and to avoid the requirements of 326 IAC 8-1-6 (BACT) as permitted in Significant Source Modification No. 091-12963-00020, issued April 6, 2001. Total emissions from the Mixer and from this modification are being compared to the PSD Significant Levels to ensure that the requirements of 326 IAC 2-2 are not being circumvented because these modifications are being done within one year of each other.

This modification to an existing major stationary source is not major because the emissions increase, including the emission increase from the modification permitted in Significant Source Modification No. 091-12963-00020, issued April 6, 2001, is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2 and 40 CFR 52.21, the PSD requirements do not apply.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this modification.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this modification.

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

This existing secondary metal production source, which is one of the 28 listed source categories, is a major PSD source. Since this modification and the construction of the High Speed Continuous Sand Mixer, permitted in SSM No. 091-12963-00020, issued April 6, 2001, are occurring within one (1) year of each other, total emissions from these two modifications will be compared to the PSD Significant Modification thresholds in order to prevent circumvention of the PSD rules.

Although controlled PM emissions from this modification and from the High Speed Continuous Sand Mixer are less than 25 tons per year, the allowable pound per hour PM emission limits for the new scrap handling operation, the raw sand storage silo, and the High Speed Continuous Sand Mixer pursuant to 326 IAC 6-3-2 can exceed 25 tons per year based on 8,760 hours of operation per year. Therefore, PM emission limits of 5.63 and 0.05 pounds per hour, respectively, will be established for this modification and for the High Speed Continuous Sand Mixer to ensure that PM emissions do not exceed 25 tons per year so that the requirements of this rule do not apply.

Also, to ensure that PM10 emissions do not exceed 15 tons per year, PM10 emission limits of 3.35 and 0.05 pounds per hour, respectively, will be established for this modification and for the High Speed Continuous Sand Mixer to ensure that PM10 emissions do not exceed 15 tons per year so that the requirements of this rule do not apply.

To comply with these limits, the baghouse controlling PM and PM10 emissions from the new scrap handling operation and the raw sand storage silo shall be in operation at all times that the new scrap handling operation and the raw sand storage silo are in operation. Also, the baghouse controlling the Mixer shall be in operation at all times that the Mixer is in operation. Additionally, the throughput of sand from the raw sand storage silo to the Mixer shall not exceed 42,924 tons of sand per twelve (12) consecutive month period. The use of the baghouse and the sand throughput

limitation on the raw sand storage silo will limit total PM and PM10 emissions from this modification and from the Mixer to less than 25 and 15 tons per year, respectively, so that the requirements of this rule do not apply.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than one hundred (100) tons per year of PM-10 and VOC. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by July 1 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 1-7 (Stack Height Provisions)

Pursuant to 326 IAC 1-7-5(a), the stack identified as Stack No. 1 through which the baghouse controlling the new scrap handling operation and the raw sand storage silo exhausts is not subject to the requirements of 326 IAC 1-7-3 because actual PM emissions after controls are less than 25 tons per year.

326 IAC 6-3-2 (Process Operations)

The particulate matter (PM) emissions from the scrap handling operation and the raw sand storage silo shall be limited as follows:

Emission Unit ID	Process Weight (tons/hr)	Allowable PM Emissions (lb/hr)	Controlled PM Emissions (lb/hr)	In Compliance?
Crusher	15	25.16	0.76	y
Rotary Reclaimer	25	35.43	0.53	y
Spent Sand Storage Silo	10	19.18	0.40	y
Sand and Metal Conveyor	25	35.43	3.6	y
Raw Sand Storage Silo	10	19.18	0.19	y

These PM emission limitations were based on the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

The baghouse exhausting through stack ID No. 1 shall be in operation at all times the rotary reclaimer, the raw sand storage silo, the spent sand storage silo, and the sand and metal conveyor are in operation, in order to comply with this limit. Potential PM emissions from the crusher are less than the allowable PM emissions, therefore, this unit is in compliance with this rule.

Testing Requirements

Testing of PM and PM10 emissions from the baghouse controlling the scrap handling operation and the raw sand storage silo is required because potential PM and PM10 emissions before control are greater than 40 tons per year and the baghouse must be used to achieve compliance with 326 IAC 6-3-2 for PM and to limit PM and PM10 emissions below 25 and 15 tons per year, respectively, so that the requirements of 326 IAC 2-2 and 40 CFR 52.21 (PSD) do not apply.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

1. The baghouse controlling the new scrap handling operation and the raw sand storage silo has applicable compliance monitoring conditions as specified below:
 - (a) Visible emissions notations of the baghouse stack exhaust (ID Stack No. 1) shall be performed once per shift during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has

worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.

- (b) The Permittee shall record the total static pressure drop across the baghouse controlling the new scrap handling operation and the raw sand storage silo, at least once per shift when the scrap handling system and the raw sand storage silo are in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 9.0 to 12.0 inches of water or a range established during the latest stack test. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when the pressure reading is outside of the above mentioned range for any one reading.
- (c) An inspection shall be performed each calendar quarter of all bags controlling the scrap handling operation and the raw sand storage silo when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.
- (d) In the event that bag failure has been observed:
 - (1) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
 - (2) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

These monitoring conditions are necessary because the baghouse for the new scrap handling operation and the raw sand storage silo must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations) and 326 IAC 2-7 (Part 70).

Conclusion

The operation of the new scrap handling operation and the raw sand storage silo shall be subject to the conditions of the attached proposed Significant Source Modification No. 091-14688-00020.

Appendix A: Grey Iron Foundry Operations

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Company Name: Weil-McLain
Address City IN Zip: 500 Blaine Street, Michigan City, IN 46360-2388
Source Mod. No.: 091-14688
Plt ID: 091-00020
Reviewer: Trish Earls
Date: July 24, 2001

SCC# 3-03-024-01

Scrap Handling - Crusher

TYPE OF MATERIAL

Metal

Throughput

LBS/HR

30000

TON/HR

15

Control Device:

Baghouse

Control Efficiency:

89.91%

326 IAC 6-3-2 Allowable PM Emission Calculation:
E = 4.1 * (P^0.67) for P<30 tons/hr
P = 15
E (lb/hr) = 25.16

	PM lbs/ton metal charged 0.5	PM10 lbs/ton metal charged 0.05	SOx lbs/ton metal charged 0.00	NOx lbs/ton metal charged 0.00	VOC lbs/ton metal charged 0.00	CO lbs/ton metal charged 0.00	Lead lbs/ton metal charged 0.00
Potential Uncontrolled Emissions lbs/hr	7.5	0.8	0.0	0.0	0.0	0.0	0.0
Potential Uncontrolled Emissions lbs/day	180.0	18.0	0.0	0.0	0.0	0.0	0.0
Potential Uncontrolled Emissions tons/year	32.9	3.3	0.0	0.0	0.0	0.0	0.0
Potential Controlled Emissions lbs/hr	0.76	0.1	0.0	0.0	0.0	0.0	0.0
Potential Controlled Emissions lbs/day	18.2	1.8	0.0	0.0	0.0	0.0	0.0
Potential Controlled Emissions tons/year	3.3	0.33	0.0	0.0	0.0	0.0	0.0

Note: Emission factors from USEPA's Factor Information Retrieval (FIRE) Data System, version 6.23.

SCC# 3-04-003-31

Scrap Handling - Rotary Reclaimer

TYPE OF MATERIAL

LBS/HR

Throughput

TON/HR

Control Device:

Baghouse

Control Efficiency:

98.90%

326 IAC 6-3-2 Allowable PM Emission Calculation:

E = 4.1 * (P^0.67) for P<30 tons/hr

P (including sand & metal) = 25

E (lb/hr) = 35.43

Metal	30000	15
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	PM lbs/ton metal charged 3.2	PM10 lbs/ton metal charged 2.24	SOx lbs/ton metal charged 0.00	NOx lbs/ton metal charged 0.00	VOC lbs/ton metal charged 0.00	CO lbs/ton metal charged 0.00	Lead lbs/ton metal charged 0.00
Potential Uncontrolled Emissions lbs/hr	48.0	33.6	0.0	0.0	0.0	0.0	0.0
Potential Uncontrolled Emissions lbs/day	1152.0	806.4	0.0	0.0	0.0	0.0	0.0
Potential Uncontrolled Emissions tons/year	210.2	147.2	0.0	0.0	0.0	0.0	0.0
Potential Controlled Emissions lbs/hr	0.53	0.37	0.0	0.0	0.0	0.0	0.0
Potential Controlled Emissions lbs/day	12.7	8.9	0.0	0.0	0.0	0.0	0.0
Potential Controlled Emissions tons/year	2.3	1.62	0.0	0.0	0.0	0.0	0.0

Note: Emission factors from USEPA's Factor Information Retrieval (FIRE) Data System, version 6.23.

Appendix A: Grey Iron Foundry Operations

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Company Name: Weil-McLain
 Address City IN Zip: 500 Blaine Street, Michigan City, IN 46360-2388
 Source Mod. No.: 091-14688
 Plt ID: 091-00020
 Reviewer: Trish Earls
 Date: July 24, 2001

SCC# 3-04-003-50 Raw Sand Storage Silo		Maximum Throughput LBS/HR TON/HR		Control Device: Baghouse Control Efficiency: 98.90%		326 IAC 6-3-2 Allowable PM Emission Calculation: E = 4.1 * (P ^{0.67}) for P<30 tons/hr P = 10 E (lb/hr) = 19.18	
TYPE OF MATERIAL		20000	10				
Sand		Limited Throughput TONS/YR					
			42,924				
	PM lbs/ton sand handled 3.6	PM10 lbs/ton sand handled 0.54	SOx lbs/ton sand handled 0.0	NOx lbs/ton sand handled 0.0	VOC lbs/ton sand handled 0.0	CO lbs/ton sand handled 0.0	Lead lbs/ton sand handled 0.0
Potential Uncontrolled Emissions lbs/hr	36.0	5.4	0.0	0.0	0.0	0.0	0.0
Potential Uncontrolled Emissions lbs/day	864.0	129.6	0.0	0.0	0.0	0.0	0.0
Potential Uncontrolled Emissions tons/year	157.7	23.7	0.0	0.0	0.0	0.0	0.0
Potential Controlled Emissions lbs/hr	0.19	0.03	0.0	0.0	0.0	0.0	0.0
Potential Controlled Emissions lbs/day	4.65	0.70	0.0	0.0	0.0	0.0	0.0
Potential Controlled Emissions tons/year	0.85	0.13	0.0	0.0	0.0	0.0	0.0

Note: Emission factors from USEPA's Factor Information Retrieval (FIRE) Data System, version 6.23.

SCC# 3-04-003-50 Spent Sand Storage Silo		Maximum Throughput TONS/HR		Control Device: Baghouse Control Efficiency: 98.90%		326 IAC 6-3-2 Allowable PM Emission Calculation: E = 4.1 * (P ^{0.67}) for P<30 tons/hr P = 10 E (lb/hr) = 19.18	
TYPE OF MATERIAL			10				
Sand							
	PM lbs/ton sand handled 3.6	PM10 lbs/ton sand handled 0.54	SOx lbs/ton sand handled 0.0	NOx lbs/ton sand handled 0.0	VOC lbs/ton sand handled 0.0	CO lbs/ton sand handled 0.0	Lead lbs/ton sand handled 0.0
Potential Uncontrolled Emissions lbs/hr	36.0	5.4	0.0	0.0	0.0	0.0	0.0
Potential Uncontrolled Emissions lbs/day	864.0	129.6	0.0	0.0	0.0	0.0	0.0
Potential Uncontrolled Emissions tons/year	157.7	23.7	0.0	0.0	0.0	0.0	0.0
Potential Controlled Emissions lbs/hr	0.40	0.06	0.0	0.0	0.0	0.0	0.0
Potential Controlled Emissions lbs/day	9.50	1.42	0.0	0.0	0.0	0.0	0.0
Potential Controlled Emissions tons/year	1.73	0.26	0.0	0.0	0.0	0.0	0.0

Note: Emission factors from USEPA's Factor Information Retrieval (FIRE) Data System, version 6.23.

Appendix A: Grey Iron Foundry Operations

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Company Name: Weil-McLain
 Address City IN Zip: 500 Blaine Street, Michigan City, IN 46360-2388
 Source Mod. No.: 091-14688
 Pit ID: 091-00020
 Reviewer: Trish Earls
 Date: July 24, 2001

SCC# 3-04-003-50 Sand Conveyor		Maximum Throughput TONS/HR		Control Device: Baghouse Control Efficiency: 89.91%		326 IAC 6-3-2 Allowable PM Emission Calculation: $E = 4.1 * (P^{0.67})$ for $P < 30$ tons/hr P (including sand & metal) = 25 E (lb/hr) = 35.43	
TYPE OF MATERIAL			10				
Sand							
	PM lbs/ton sand handled 3.6	PM10 lbs/ton sand handled 0.54	SOx lbs/ton sand handled 0.0	NOx lbs/ton sand handled 0.0	VOC lbs/ton sand handled 0.0	CO lbs/ton sand handled 0.0	Lead lbs/ton sand handled 0.0
Potential Uncontrolled Emissions lbs/hr	36.0	5.4	0.0	0.0	0.0	0.0	0.0
Potential Uncontrolled Emissions lbs/day	864.0	129.6	0.0	0.0	0.0	0.0	0.0
Potential Uncontrolled Emissions tons/year	157.7	23.7	0.0	0.0	0.0	0.0	0.0
Potential Controlled Emissions lbs/hr	3.6	0.5	0.0	0.0	0.0	0.0	0.0
Potential Controlled Emissions lbs/day	87.2	13.1	0.0	0.0	0.0	0.0	0.0
Potential Controlled Emissions tons/year	15.9	2.4	0.0	0.0	0.0	0.0	0.0

Note: Emission factors from USEPA's Factor Information Retrieval (FIRE) Data System, version 6.23.

Appendix A: Grey Iron Foundry Operations

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Company Name: Weil-McLain
Address City IN Zip: 500 Blaine Street, Michigan City, IN 46360-2388
Source Mod. No.: 091-14688
Plt ID: 091-00020
Reviewer: Trish Earls
Date: July 24, 2001

SCC# 3-03-024-01 Scrap Handling - Crusher							
TYPE OF MATERIAL		Throughput LBS/HR TON/HR		Control Device: Baghouse Control Efficiency: 89.91%		326 IAC 6-3-2 Allowable PM Emission Calculation: E = 4.1 * (P ^{0.67}) for P<30 tons/hr P = 15 E (lb/hr) = 25.16	
Metal		30000 15					
	PM lbs/ton metal charged 0.5	PM10 lbs/ton metal charged 0.05	SOx lbs/ton metal charged 0.00	NOx lbs/ton metal charged 0.00	VOC lbs/ton metal charged 0.00	CO lbs/ton metal charged 0.00	Lead lbs/ton metal charged 0.00
Potential Uncontrolled Emissions lbs/hr	7.5	0.8	0.0	0.0	0.0	0.0	0.0
Potential Uncontrolled Emissions lbs/day	180.0	18.0	0.0	0.0	0.0	0.0	0.0
Potential Uncontrolled Emissions tons/year	32.9	3.3	0.0	0.0	0.0	0.0	0.0
Potential Controlled Emissions lbs/hr	0.76	0.1	0.0	0.0	0.0	0.0	0.0
Potential Controlled Emissions lbs/day	18.2	1.8	0.0	0.0	0.0	0.0	0.0
Potential Controlled Emissions tons/year	3.3	0.33	0.0	0.0	0.0	0.0	0.0

Note: Emission factors from USEPA's Factor Information Retrieval (FIRE) Data System, version 6.23.

SCC# 3-04-003-31 Scrap Handling - Rotary Reclaimer							
TYPE OF MATERIAL		Throughput LBS/HR TON/HR		Control Device: Baghouse Control Efficiency: 98.90%		326 IAC 6-3-2 Allowable PM Emission Calculation: E = 4.1 * (P ^{0.67}) for P<30 tons/hr P (including sand & metal) = 25 E (lb/hr) = 35.43	
Metal		30000 15					
	PM lbs/ton metal charged 3.2	PM10 lbs/ton metal charged 2.24	SOx lbs/ton metal charged 0.00	NOx lbs/ton metal charged 0.00	VOC lbs/ton metal charged 0.00	CO lbs/ton metal charged 0.00	Lead lbs/ton metal charged 0.00
Potential Uncontrolled Emissions lbs/hr	48.0	33.6	0.0	0.0	0.0	0.0	0.0
Potential Uncontrolled Emissions lbs/day	1152.0	806.4	0.0	0.0	0.0	0.0	0.0
Potential Uncontrolled Emissions tons/year	210.2	147.2	0.0	0.0	0.0	0.0	0.0
Potential Controlled Emissions lbs/hr	0.53	0.37	0.0	0.0	0.0	0.0	0.0
Potential Controlled Emissions lbs/day	12.7	8.9	0.0	0.0	0.0	0.0	0.0
Potential Controlled Emissions tons/year	2.3	1.62	0.0	0.0	0.0	0.0	0.0

Note: Emission factors from USEPA's Factor Information Retrieval (FIRE) Data System, version 6.23.

Appendix A: Grey Iron Foundry Operations

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Company Name: Weil-McLain
 Address City IN Zip: 500 Blaine Street, Michigan City, IN 46360-2388
 Source Mod. No.: 091-14688
 Plt ID: 091-00020
 Reviewer: Trish Earls
 Date: July 24, 2001

SCC# 3-04-003-50 Raw Sand Storage Silo		Maximum Throughput LBS/HR TON/HR		Control Device: Baghouse Control Efficiency: 98.90%		326 IAC 6-3-2 Allowable PM Emission Calculation: E = 4.1 * (P ^{0.67}) for P<30 tons/hr P = 10 E (lb/hr) = 19.18	
TYPE OF MATERIAL		20000	10				
Sand		Limited Throughput TONS/YR					
			42,924				
	PM lbs/ton sand handled 3.6	PM10 lbs/ton sand handled 0.54	SOx lbs/ton sand handled 0.0	NOx lbs/ton sand handled 0.0	VOC lbs/ton sand handled 0.0	CO lbs/ton sand handled 0.0	Lead lbs/ton sand handled 0.0
Potential Uncontrolled Emissions lbs/hr	36.0	5.4	0.0	0.0	0.0	0.0	0.0
Potential Uncontrolled Emissions lbs/day	864.0	129.6	0.0	0.0	0.0	0.0	0.0
Potential Uncontrolled Emissions tons/year	157.7	23.7	0.0	0.0	0.0	0.0	0.0
Potential Controlled Emissions lbs/hr	0.19	0.03	0.0	0.0	0.0	0.0	0.0
Potential Controlled Emissions lbs/day	4.65	0.70	0.0	0.0	0.0	0.0	0.0
Potential Controlled Emissions tons/year	0.85	0.13	0.0	0.0	0.0	0.0	0.0

Note: Emission factors from USEPA's Factor Information Retrieval (FIRE) Data System, version 6.23.

SCC# 3-04-003-50 Spent Sand Storage Silo		Maximum Throughput TONS/HR		Control Device: Baghouse Control Efficiency: 98.90%		326 IAC 6-3-2 Allowable PM Emission Calculation: E = 4.1 * (P ^{0.67}) for P<30 tons/hr P = 10 E (lb/hr) = 19.18	
TYPE OF MATERIAL			10				
Sand							
	PM lbs/ton sand handled 3.6	PM10 lbs/ton sand handled 0.54	SOx lbs/ton sand handled 0.0	NOx lbs/ton sand handled 0.0	VOC lbs/ton sand handled 0.0	CO lbs/ton sand handled 0.0	Lead lbs/ton sand handled 0.0
Potential Uncontrolled Emissions lbs/hr	36.0	5.4	0.0	0.0	0.0	0.0	0.0
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Potential Uncontrolled Emissions tons/year	157.7	23.7	0.0	0.0	0.0	0.0	0.0
Potential Controlled Emissions lbs/hr	0.40	0.06	0.0	0.0	0.0	0.0	0.0
Potential Controlled Emissions lbs/day	9.50	1.42	0.0	0.0	0.0	0.0	0.0
Potential Controlled Emissions tons/year	1.73	0.26	0.0	0.0	0.0	0.0	0.0

Note: Emission factors from USEPA's Factor Information Retrieval (FIRE) Data System, version 6.23.

Appendix A: Grey Iron Foundry Operations

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 Pit ID: 091-00020
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SCC# 3-04-003-50 Sand Conveyor		Maximum Throughput TONS/HR		Control Device: Baghouse Control Efficiency: 89.91%		326 IAC 6-3-2 Allowable PM Emission Calculation: $E = 4.1 * (P^{0.67})$ for $P < 30$ tons/hr P (including sand & metal) = 25 E (lb/hr) = 35.43	
TYPE OF MATERIAL			10				
Sand							
	PM lbs/ton sand handled 3.6	PM10 lbs/ton sand handled 0.54	SOx lbs/ton sand handled 0.0	NOx lbs/ton sand handled 0.0	VOC lbs/ton sand handled 0.0	CO lbs/ton sand handled 0.0	Lead lbs/ton sand handled 0.0
Potential Uncontrolled Emissions lbs/hr	36.0	5.4	0.0	0.0	0.0	0.0	0.0
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Potential Uncontrolled Emissions tons/year	157.7	23.7	0.0	0.0	0.0	0.0	0.0
Potential Controlled Emissions lbs/hr	3.6	0.5	0.0	0.0	0.0	0.0	0.0
Potential Controlled Emissions lbs/day	87.2	13.1	0.0	0.0	0.0	0.0	0.0
Potential Controlled Emissions tons/year	15.9	2.4	0.0	0.0	0.0	0.0	0.0

Note: Emission factors from USEPA's Factor Information Retrieval (FIRE) Data System, version 6.23.